



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | F        | ILING DATE                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|-----------------|----------|-------------------------------|----------------------|-------------------------|------------------|
| 09/675,533      |          | 09/29/2000                    | Rabah Hamdi          | 1662-28700 (P99-2774)   | 2633             |
| 22879           | 7590     | 01/21/2004                    |                      | EXAMI                   | NER              |
|                 |          | ARD COMPANY                   | DU, THUAN N          |                         |                  |
|                 |          | 04 E. HARMONY<br>OPERTY ADMIN | ART UNIT             | PAPER NUMBER            |                  |
| FORT COL        | LINS, CO | 80527-2400                    | 2116                 | 7                       |                  |
|                 |          |                               | •                    | DATE MAILED: 01/21/2004 | /                |
|                 |          |                               | - 🚅                  |                         |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ,   |   |            | Application No. |   | Applicant(s) | oplicant(s) |  |  |  |  |
|---|---|------------|-----------------|---|--------------|-------------|--|--|--|--|
| Office Action Commons   |   |            | 09/675,53       | 3   | HAMDI, RABAH |             |  |  |  |  |
|   | Office Action Summary   |            | Examiner        |   | Art Unit     |             |  |  |  |  |
| <u>-</u>  |   | Thuan N. [ | · -             | 2116  |              |             |  |  |  |  |
|   | The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |            |                 |   |              |             |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |   |            |                 |   |              |             |  |  |  |  |
| 1)⊠   | Responsive to communication(s) filed on <u>21 November 2003</u> .   |            |                 |   |              |             |  |  |  |  |
| 2a) <u></u>   | This action is <b>FINAL</b> . 2b)[  | ⊠ This a   | action is no    | n-final.  |              |             |  |  |  |  |
| 3)□   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. |            |                 |   |              |             |  |  |  |  |
| Disposition of Claims   |   |            |                 |   |              |             |  |  |  |  |
| 4)🖂   | Claim(s) <u>1-27</u> is/are pending in the application.   |            |                 |   |              |             |  |  |  |  |
|   | 4a) Of the above claim(s) is/are withdrawn from consideration.  |            |                 |   |              |             |  |  |  |  |
|   | 5) Claim(s) is/are allowed.   |            |                 |   |              |             |  |  |  |  |
| · · · · · · · · · · · · · · · · · · ·   | 6) Claim(s) 1-27 is/are rejected.   |            |                 |   |              |             |  |  |  |  |
| ·   | Claim(s) is/are objected to.  |            |                 |   |              |             |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or election requirement.   |   |            |                 |   |              |             |  |  |  |  |
| Applicat  | ion Papers  |            |                 |   |              |             |  |  |  |  |
| 9)[   | The specification is objected to by the E   | Examiner.  | •               |   |              |             |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  |   |            |                 |   |              |             |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |            |                 |   |              |             |  |  |  |  |
|   | Replacement drawing sheet(s) including the  |            | -               |   |              | • •         |  |  |  |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |            |                 |   |              |             |  |  |  |  |
| Priority under 35 U.S.C. §§ 119 and 120   |   |            |                 |   |              |             |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage</li> </ul>  |   |            |                 |   |              |             |  |  |  |  |
| application from the International Bureau (PCT Rule 17.2(a)).   |   |            |                 |   |              |             |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet.  37 CFR 1.78.   |   |            |                 |   |              |             |  |  |  |  |
| a) The translation of the foreign language provisional application has been received.   |   |            |                 |   |              |             |  |  |  |  |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  |   |            |                 |   |              |             |  |  |  |  |
| Attachmen   | ıt(s)   |            |                 |   |              |             |  |  |  |  |
| 2) Notice   | ce of References Cited (PTO-892)<br>ce of Draftsperson's Patent Drawing Review (PTO<br>mation Disclosure Statement(s) (PTO-1449) Pape   |            | ·               | 4) Interview Summary 5) Notice of Informal P. 6) Other: |              |             |  |  |  |  |

Art Unit: 2116

### **DETAILED ACTION**

1. This Office Action is in response to Amendment filed on November 21, 2003 (Paper No.

5).

- 2. Claims 24-27 have been added.
- 3. Claims 1-27 are presented for examination.
- 4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

# Claim Rejections - 35 USC § 112

- 5. Claims 24-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
- 6. Claim 24 recites the limitation "the preferred power level" in line 8. There is insufficient antecedent basis for this limitation in the claim.
- 7. Claim 25 is a dependent claim which cannot depend on itself. For further examination, examiner considers claim 25 depends on claim 24.

# Claim Rejections - 35 USC § 103

8. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hämäläinen et al. [Hämäläinen] (U.S. Patent No. 6,289,217) and Lindroth et al. [Lindroth] (U.S. Patent No. 5,887,245).

Art Unit: 2116

9. Regarding claims 1 and 24, Hämäläinen teaches a method of adaptive power control in a network system comprising the steps of:

sending a training packet from a transmission node (mobile station) of the network to a receiving node (base station) in the network at a predetermined power level (given initial power) [col. 12, lines 40-41];

determining a preferred power level for reliable communications between the transmission node and the receiving node [col. 12, lines 41-44];

sending a configuration packet from said receiving node to said transmission node including the preferred power level for communication [col. 12, lines 44-52].

Hämäläinen does not explicitly teach the step of sending a primary data communication from the transmission node to the receiving node at the preferred power level. Hämäläinen teaches "a method which combines the adjusting of the transmission power and a dynamic variation of the <u>data transmission</u> capacity reserved for a given connection." (emphasis added by the examiner). Therefore, Hämäläinen implicitly teaches the claimed step of sending a primary data communication from the transmission node to the receiving node at the preferred power level.

Hämäläinen does not explicitly teach the step of receiving the training packet at a received power level. Also, Hämäläinen does not explicitly specify that the preferred power level is determined based on a comparison of the received power level to the predetermined power level.

Lindroth teaches a method for regulating transmission power in a network system comprising the steps of:

Art Unit: 2116

receiving the training packet at a received power level [col. 4, lines 47-50]; and determining a preferred power level for reliable communications between the transmission node and the receiving node based on a comparison of the received power level to the predetermined power level [col. 4, lines 1-15, 44-63].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Hämäläinen and Lindroth because they both teach method for regulating transmission power in a network system. Lindroth's teaching of determining the preferred power level based on a comparison of the received power level to the predetermined power level would increase the accuracy of the system by allowing the preferred power level is calculated to include the path loss or attenuation.

- 10. Regarding claims 2-9 and 25, these claims are directed to method steps for adaptively controlling power in a network system of claims 1 and 24. As stated above, Hämäläinen and Lindroth teach the invention substantially as set forth in claims 1 and 24. At the time of the invention, one of ordinary skill in the art would have readily recognized that Hämäläinen and Lindroth may obviously also teach the method steps of claims 1 and 24 as set forth in claims 2-9 and 25. As such, claims 2-9 and 25 are rejected under the same rationale with respect to claims 1 and 24.
- 11. Regarding claims 10-23 and 26-27, Hämäläinen and Lindroth together teach the claimed method steps. Therefore, Hämäläinen and Lindroth together teach the apparatus to implement the claimed method steps.

Art Unit: 2116

### Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuan N. Du whose telephone number is (703) 308-6292. The examiner can normally be reached on Monday-Friday: 9:00 am - 5:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on (703) 305-9717.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

The fax numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Thuan N. Du

January 16, 2004